PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	10597022
Filing Date	2007-06-18
First Named Inventor	Chen et al.
Art Unit	1625
Examiner Name	Taylor V. Oh
Attorney Docket Number	22727/04418

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/VO/	1	5776888		1988-07-07	Leone-Bay	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/VO/	1	20030225054		2003-12-04	Duan	
/VO/	2	20090137679		2009-05-28	Chen	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
/VO/	1	01/16106	WO		2001-03-08	Schering AG		☐
/VO/	2	01/34131	WO		2001-05-17	Warner		☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10597022
	Filing Date	2007-06-18
	First Named Inventor	Chen et al.
	Art Unit	1625
	Examiner Name	Taylor V. Oh
	Attorney Docket Number	22727/04418

/VO/	3	02/26696	WO		2002-04-04	Prolifix Ltd.		☐
/VO/	4	02/74298	WO		2002-09-26	Ono Pharmaceutical		☐
/VO/	5	03/13493	WO		2003-02-20	Italfarmaco SPA		☐
/VO/	6	05/055928	WO		2005-06-23	The Ohio State University Research Foundation		☐

If you wish to add additional Foreign Patent Document citation information please click the Add button [Add]

NON-PATENT LITERATURE DOCUMENTS [Remove]

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
/VO/	1	Office action from U.S. Serial No. 12/361,626 dated 09/23/2009.	☐
/VO/	2	Amendment from U.S. Serial No. 12/361,626 dated 01/25/2010.	☐
/VO/	3	Supplemental Amendment from U.S. Serial No. 12/361,626 dated 02/24/2010.	☐
/VO/	4	Office action from U.S. Serial No. 12/361,626 dated 05/28/2010.	☐
/VO/	5	European Search report dated June 1, 2010 from EP Application No. 04812666.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10597022
	Filing Date	2007-06-18
	First Named Inventor	Chen et al.
	Art Unit	1625
	Examiner Name	Taylor V. Oh
	Attorney Docket Number	22727/04418

/VO/	6	FINNIN et al., "Structures of a histone deacetylase homologue bound to the TSA and SAHA inhibitors", Nature, 401, 188-193, 1999	☐
	7	FUINO, et al, "Histone deacetylase inhibitor LAQ824 down-regulates Her-2 and sensitizes human breast cancer cells to trastuumab, taxotere, gemcitabine, and epothilone B", Mol Cancer Ther, 2, 971-984, 2003	☐
	8	FURUMAI et al., "Potent histone deacetylase inhibitors build from trichostatin A and cyclic tetrapeptide antibiotics including trapoxin", Proc Natl Acad Sci USA, 98: 87-92, 2001	☐
	9	GROZINGER et al. "Deacetylase enzymes: biological functions and the use of small-molecule inhibitors", Chem Biol 9: 3-16, 2002	☐
	10	JOHNSTONE, "Histone-deacetylase inhibitors: novel drugs for the treatment of cancer", Nat Rev Drug Discov, 1: 287-299, 2002	☐
	11	KIJIMA et al., "Trapoxin, an antitumor cyclic tetrapeptide, is an irreversible inhibitor of mammalian histone deacetylase", J Biol Chem, 268, 22429-22435, 1993	☐
	12	KRAMER et al. "Histone deacetylase as a therapeutic target", Trends Endocrinol Metab, 12: 294-300, 2001	☐
	13	LEA et al., "Discordant effects of butyrate analogues on erythroleukemia cell proliferation, differentiation and histone deacetylase", Anticancer Res. 15, 879-883, 1995	☐
	14	LU, et al., "Zn2+-chelating motif-tethered short-chain fatty acids as a novel class of histone deacetylase inhibitors", J Med Chem, 47, 467-474, 2004	☐
	15	MARKS et al. "Histone deacetylases and cancer: causes and therapies", Nat. Rev. Cancer 1: 194-202, 2001	☐
	16	NAKAJIMA et al., "FR901228, a potent antitumor antibiotic, is a novel histone deacetylase inhibitor", Exp Cell Res 241, 126-133, 1998	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10597022
	Filing Date	2007-06-18
	First Named Inventor	Chen et al.
	Art Unit	1625
	Examiner Name	Taylor V. Oh
	Attorney Docket Number	22727/04418

/VO/	17	REMISZEWSKI et al, "Inhibitors of human histone deacetylase: synthesis and enzyme and cellular ativity of straight chain hydroxamates" J Med Chem, 45, 753-757, 2002	☐
	18	RICHON et al., "A class of hybrid polar inducers of transformed cell differentiation inhibits histone deacetylases", Proc Natl Acad Sci USA 95 3003-3007, 1998	☐
	19	SHUTE et al., "Analogues of the cytostatic and antimitogenic agents chlamydocin and HC-toxin: synthesis and biological activity of chloromethyl ketone and diazomethyl ketone functionalized cyclic tetrapeptides", J Med Chem 30, 71-78, 1987	☐
	20	STERNSON et al., "Synthesis of 7200 small molecules based on a substructural analysis of the histone deacetylase inhibitors trichostatin and trapoxin", Org. Lett. 3, pp. 4239-4242 (2001)	☐
	21	VANOMMESLAEGHE et al., "Ab initio study of the binding of Trichostatin A (TSA) in the active site of histone deacetylase like protein (HDLP), Org Biomol Chem, 1, 2951-2957, 2003	☐
	22	HAN et al., "Apicidin, a histone deacetylase inhibitor, inhibits proliferation of tumor cells via induction of p21WAF1/Cip1 and gelsolin", Cancer Res, 60, 6068-6074, 2000	☐
	23	JUNG et al., "Amide analogues of trichostatin A as inhibitors of histone deacetylase and inducers of terminal cell differentiation", J Med Chem 42, 4669-4679, 1999	☐
	24	KIM et al., "Inhibition of histone deacetylase ncreases cytotoxicity to anticancer drugs targeting DNA", Cancer Res 63, 7291-7300, 2003	☐
	25	KIM et al., "Synthesis and Biological Evolution of 3-(4-Substituted-phenyl)-N-hydroxy-2-propenamides, a new class of histone deacetylase inhibitors", J of Medicinal Chemistry, American Chemical Society, vol. 46, no. 26, January 1, 2003, pp. 5745-5751	☐
	26	KRAKER et al., "Modulation of histone acetylation by [4-(acetylamino)-N-(2-amino-phenyl) benzamide] in HCT-8 colon carcinoma", Mol Cancer Ther, 2, 401-408, 2003	☐
	27	LU et al., "Efficacy of a Novel Histone Deacetylase Inhibitor in Murine Models of Hepatocellular Carcinoma", Hepatology, pp. 1119-1130, October 2007	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	10597022
	Filing Date	2007-06-18
	First Named Inventor	Chen et al.
	Art Unit	1625
	Examiner Name	Taylor V. Oh
	Attorney Docket Number	22727/04418

/VO/	28	LUCAS et al., "The histone deacetylase inhibitor MS-275 induces caspase-dependent apoptosis in B-cell chronic lymphocytic leukemia cells", Leukemia, 18, 1207-1214, 2004	☐
	29	MAEDA et al., "Potent histone deacetylase inhibitors: N-hydroxybenzamides with antitumor activities", Bioorganic & Medicinal Chemistry, vol. 12, no. 16, pp. 4351-4360, Juy 1, 2004	☐
	30	MARKS et al. "Histone deacetylase inhibitors: inducers of differentiation or apoptosis of transformed cells", J Natl Cancer Inst, 92: 1210-1216, 2000	☐
	31	MILLER, et al., "Histone deacetylase inhibitors", J Med Chem 46, 5097-5116, 2003	☐
	32	PIEKARZ, et al., "T-cell lymphoma as a model for the use of histone deacetylase inhibitors in cancer therapy: impact of depsipeptide on molecular markers, therapeutic targets, and mechanisms of resistance", Blood, 103, 4636-4643, 2004	☐
	33	YANG et al., "A Rationally Designed Histone Deacetylase Inhibitor with Distinct Antitumor Activity against Ovarian Cancer", Neoplasia, vol. 11, no. 6, June 2009, pp. 552-563	☐
	34	LUCAS et al., "The novel deacetylase inhibitor AR-42 Demonstrates Pre-Clinical Activity in B-Cell Malignancies In Vitro and In Vivo", PLOS ONE, vol. 5, issue 6, pp 1-10, June 2010	☐

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/Taylor Oh/ (08/23/2010)	Date Considered	08/23/2010

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	10597022
Filing Date	2007-06-18
First Named Inventor	Chen et al.
Art Unit	1625
Examiner Name	Taylor V. Oh
Attorney Docket Number	22727/04418

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Raymond Russell/	Date (YYYY-MM-DD)	2010-08-16
Name/Print	Raymond N. Russell	Registration Number	52185

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.